







• I<sub>FAV</sub> 0.5A



### **Mechanical Data**

• Package: SOD123

• **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102

• Polarity: Cathode line denotes the cathode end

• Marking: R6

### ■Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	VALUE
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	V	60
DC Blocking Voltage	$V_R$	V	60
Peak forward surge current (8.3ms, half sine)	I <sub>FSM</sub>	Α	5.5
Average forward current	I <sub>FAV</sub>	Α	0.5
Power dissipation	P <sub>D</sub>	mW	410
Thermal Resistance Junction to Ambient Air	RθJA	°C/W	244
Maximum junction temperature	T <sub>j</sub>	°C	-55 to +125
Storage temperature range	$T_{stg}$	°C	-55 to +125

### **■Electrical Characteristics** (Ta=25°C Unless otherwise specified)

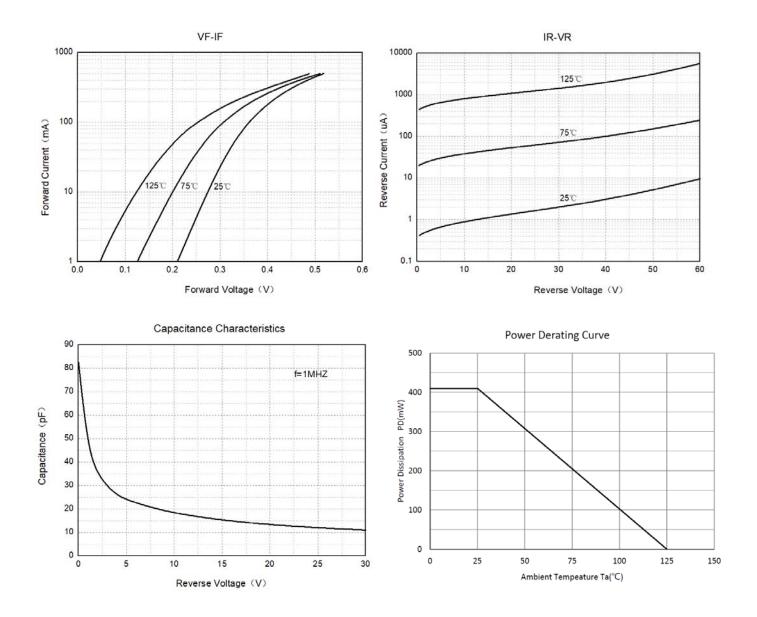
PARAMETER	Symbol	UNIT	Conditions	Min	Тур	Max
Breakdown Voltage	V <sub>R</sub>	V	I <sub>R</sub> =0.1mA	60		
Forward Voltage	V <sub>F</sub>	V	I <sub>F</sub> =0.5A			0.7
Reverse Leakage Current	I <sub>R</sub>	mA	V <sub>R</sub> =60V			0.1
Junction Capacitance	CJ	pF	V <sub>R</sub> =4V,f=1MHz		30	

**■Ordering Information** (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MBR0560	F2	Approximate 0.011	3000	30000	120000	7" reel

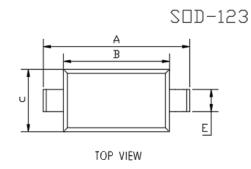


### **■ Characteristics** (Typical)



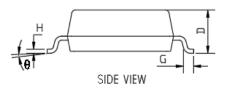


### **■ Outline Dimensions**

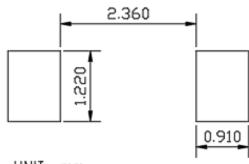




DIMENSIONS					
DIM	INC	HES	ММ		
	MIN	MAX	MN	MAX	
А	0.140	0.152	3.550	3.850	
В	0.100	0.112	2.550	2.850	
С	0.055	0.071	1.400	1.800	
D	0.037	0.053	0.950	1.350	
Ε	0.020	0.028	0.510	0.710	
G	0.006	0.018	0.150	0.450	
Н	0.003	0.010	0.080	0.250	
J	0.000	0.006	0.000	0.150	
Δ					



## ■ Soldering Footprint



UNIT: mm

SUGGESTED SOLDER PAD LAYOUT



#### **Disclaimer**

The information presented in this document is for reference only. Shanghai Sunco Electronics Co., Ltd reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Russiansunco or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website http:// <a href="http://www.russiansunco.com">www.russiansunco.com</a>, or consult your nearest Russiansunco's sales office for further assistance.